

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HIROAKI NAKAI,
SHINICHI KOBAYASHI, MOTOHARU ISHII,
ATSUSHI OHBA, TOMOSHI FUTATSUYA
and AKIRA HOSOGANE

Appeal No. 1997-1641
Application 08/352,143¹

ON BRIEF

Before URYNOWICZ, FLEMING and FRAHM, Administrative Patent Judges.

URYNOWICZ, Administrative Patent Judge.

Decision on Appeal

This appeal is from the final rejection of claims 1, 2, 5-7, 9, 12 and 13.

The invention pertains to a voltage regulator. Claim 1, the only independent claim, is illustrative and reads as follows:

¹ Application for patent filed December 1, 1994.

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1. A semiconductor device comprising:
first charge pump means for generating a first voltage of a first polarity,
voltage generation means for generating a second voltage of a second polarity differing from said first polarity,
first voltage-dividing means for generating a third voltage of said second polarity by voltage-division from said first and second voltages, and
first control means for controlling an operation of said first charge pump means in response to a level of said third voltage.

The references relied upon by the examiner as evidence of obviousness are:

Cordoba et al. (Cordoba)	5,347,172	Sep. 13,
1994		
Watsuji et al. (Watsuji)	5,432,738	Jul. 11,
1995		
		(filed Jan. 27,
1994)		

Claims 1, 2, 6, 7, 9, 12 and 13 stand rejected under 35 U.S.C.

§ 102(e) as being anticipated by Cordoba.

Claim 5 stands rejected under 35 U.S.C. § 103 as being unpatentable over Cordoba².

The respective positions of the examiner and the appellants with regard to the propriety of these rejections are set forth in

² Although Watsuji is referred to by the examiner in his explanation for the rejection of dependent claim 5, Watsuji is not included in the formal statement of the rejection of the claim.

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the examiner's answer (Paper No. 15) and the supplemental examiner's answers (Paper Nos. 18 and 24) and the appellants' brief (Paper No. 14) and reply briefs (Paper Nos. 16 and 22).

Opinion

After consideration of the positions and arguments presented by both the examiner and the appellants, we have concluded that the rejection should not be sustained.

With respect to independent claim 1, appellants contend that Cordoba does not disclose voltage generation means for generating a second voltage of a second polarity differing from said first polarity. At page 10, lines 8-11, of the brief, appellants argue that there is no teaching in the reference for a second charge pump to provide the power supply voltage V_{cc} . It is urged that the external battery of Cordoba utilized to generate the voltage V_{cc} is not a structural equivalent of the voltage generation means described in appellants' specification. In re Donaldson, 16 F.3d 1189, 29 USPQ2d 1845 (Fed. Cir. 1994).

We agree with the appellants' position that claim 1 is not anticipated by Cordoba, and we will not sustain the rejection of this claim. The examiner's argument that an inherent voltage generation means supplies the voltage V_{cc} in Cordoba is not persuasive. The examiner has not identified what he means by an inherent voltage generation means. Having failed to do so, it is not known whether it is a corresponding structure, or an equivalent, of the second charge pump 25 in appellants' Figure 1. 35 U.S.C. § 112, sixth paragraph.

Furthermore, there is no evidence that the voltage V_{cc} is provided by any apparatus other than the common battery, and it has not been established that a battery is an equivalent of the corresponding structure including the second charge pump 25 described in appellants' specification, and at page 3, line 18, to page 4, line 22, of appellants' brief in its Summary of Invention.

Whereas we will not sustain the rejection of sole independent claim 1 over Cordoba, we will not sustain the rejection of dependent claims 2, 5-7, 9, 12 and 13 over that prior art. Watsuji is not relied on by the examiner to compensate for the deficiency of Cordoba with respect to claim 1.

REVERSED

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STANLEY M. URYNOWICZ, JR.)	
Administrative Patent Judge)	
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MICHAEL R. FLEMING)	
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